

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 11/16/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,170	01/22/2004	Bahar N. Wadia	37041-11007	7836
2574	7590 11/16/2004		EXAMINER	
JENNER & BLOCK, LLP ONE IBM PLAZA			TRUONG, BAO Q	
CHICAGO, IL 60611			ART UNIT	PAPER NUMBER
,			2875	

Please find below and/or attached an Office communication concerning this application or proceeding.

,	Application No.	Applicant(s)				
•						
Office Action Summary	10/764,170	WADIA ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication ap	Bao Q. Truong	2875				
Period for Reply	pour on the cover once wan are c	ion coponacioc dadi cos				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailin earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tin ly within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	*.					
1) Responsive to communication(s) filed on 22 J	lanuary 2004.	·				
2a) ☐ This action is FINAL . 2b) ☒ This	s action is non-final.					
·	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-55 is/are pending in the application	ı .	•				
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
•	6)⊠ Claim(s) <u>1-55</u> is/are rejected.					
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	or election requirement.	·				
Application Papers		•				
9) The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>22 January 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureat * See the attached detailed Office action for a list	ts have been received. ts have been received in Applicati prity documents have been receive tu (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail D					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal F	Patent Application (PTO-152)				
Paper No(s)/Mail Date <u>20 September 2004</u> .	6) Other:					

Art Unit: 2875

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a user interface panel" of claims 5 and 33, the "a sensor" of claims 24 and 51, the "a first electrode" of claims 25 and 52, the "a second electrode" of claims 26 and 53, the "an active component" of claims 27 and 54, and the "an integrated control circuit" of claims 28 and 55 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will

Art Unit: 2875

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1 and 29 are objected to because of the following informalities: "a substrate" in line 2 should be changed to –said substrate-- as it refers to "a substrate" in line 1. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 17-22, 29-37 and 45-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen [US 5,226,723].

Regarding claims 1 and 29, Chen discloses a display having a substrate [2] with a first surface and a second surface, a penetration through the substrate [2] with a side wall [21], an entrance opening, an exit opening, and a light source [3] (figure 1).

Regarding claims 2 and 30, Chen discloses said substrate [2] being uniform thickness (figure 1).

Regarding claims 3 and 31, Chen discloses said substrate [2] being of varying cross-section (figure 1).

Art Unit: 2875

Regarding claims 4 and 32, Chen discloses a printed wring board [1] (figure 1).

Regarding claims 5 and 33, Chen discloses a user interface panel [22] (figure 1).

Regarding claims 6-9 and 34-37, Chen discloses a reflective side wall coating [21] (figures 1-2).

Regarding claims 17-20 and 45-48, Chen discloses LED [3] (figure 2).

Regarding claims 21 and 49, Chen discloses a single element defined by a single aperture (figures 1-2).

Regarding claims 22 and 50, Chen discloses a plurality of elements defined by a plurality of apertures (figures 1-2).

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 10-16 and 38-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Telefonbau [DE 1099403].

Regarding claims 10-12 and 38-40, Chen does not disclose the light guide within the penetration.

Telefonbau teaches a light guide [5] within a penetration (figure 4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the penetration of Chen with the light guide as taught by

Art Unit: 2875

Telefonbau to transmit light for purpose of providing a combined solid structure with a substrate to prevent breakable.

Regarding claims 13-14 and 41-42, Chen discloses the substrate [2] being substantially imperious to light transmission (figures 1-2).

Regarding claims 15 and 43, Telefonbau discloses a light diffuser [2] (figure 4).

Regarding claims 16 and 44, Telefonbau discloses a layer of light transmissive

[12] (figure 4).

7. Claims 23-28 and 51-55 are rejected under 35 U.S.C. 103(a) as being obvious over Chen in view of Caldwell [US 5,594,222].

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

Art Unit: 2875

in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Regarding claims 23-28 and 51-55, Chen does not disclose the sensor mounted on the substrate, the first and second electrodes disposed on the substrate, the active component and the integrated control circuit.

Caldwell discloses a touch sensor including electrodes, an active component and an integrated control circuit (abstract, figures 1-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the substrate of Chen with the touch sensor including two electrodes, the active component and the integrated control circuit as taught by Caldwell for purpose of providing an advantageous way of detecting user contact of an opposite side of a substrate.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mouyard et al. [US 4,254,453] discloses LEDs array with a diffuse lens; Koike et al. [US 6,345,903] discloses a glass epoxy resin in LED; Morley et al. [US 6,809,470] discloses the use of OLED and PLED.

Art Unit: 2875

Page 7

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bao Q. Truong whose telephone number is (571) 272-2383. The examiner can normally be reached on Monday-Friday (8:00 AM - 4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra L. O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bao Q. Truong

Examiner

Art Unit 2875

Thomas M. Sambur Primay Examina